

# AFTER BURNER<sup>TM</sup>

AERIAL ARCADE ACE

T H E S T O R Y



SEGA<sup>®</sup>

ACTIVISION







# THE AFTERBURNER STORY

## THE LEGEND CONTINUES

**E**arly 1988 saw a revolution in the arcades. A new game had hit the streets, a game so brilliant in its design and concept that the word went round like wildfire. Within weeks, queues were forming in the arcades – here at last was a game living up to the hype, a state-of-the-art smash unparalleled in the history of computer action.

That game was **AFTERBURNER**.

With its incredible hydraulic simulator offering spectacular fast-paced excitement, stereophonic sound and body-jarring pitch and yaw, **AFTERBURNER** had everyone hooked. It was the most complex game ever designed – and what a game. Sega took a gamble with the expensive and sophisticated equipment. But it paid off, with **AFTERBURNER** becoming the number one arcade game in the country, smashing all previous takings.

The next step? To make a dream come true for thousands of kids hooked on this most exciting flying game – and bring **AFTERBURNER** to the home micro.

## THEY SAID IT COULDN'T BE DONE

**I**n the heart of **Southampton** on the south coast, a highly trained team of professionals watched with interest the phenomenal success of the game. They noted with care the intense demand, the fantastic interest and the unbelievable challenge such a project would present. Many said it couldn't be done, but **Activision** knew better. Converting **AFTERBURNER** might be a seemingly impossible task, but **The Software Studios**, Activision's development team, were more than prepared to prove the cynics wrong. So Activision pitched for the game – and **won**. Immediately, designers, programmers and producers pored over storyboards, specifications, and plans. Recruiting programmers who could handle the project was the next step, and the most important one of all.

Following a period of intensive searching, Activision got together a formidable line-up that would take on this awesome task:

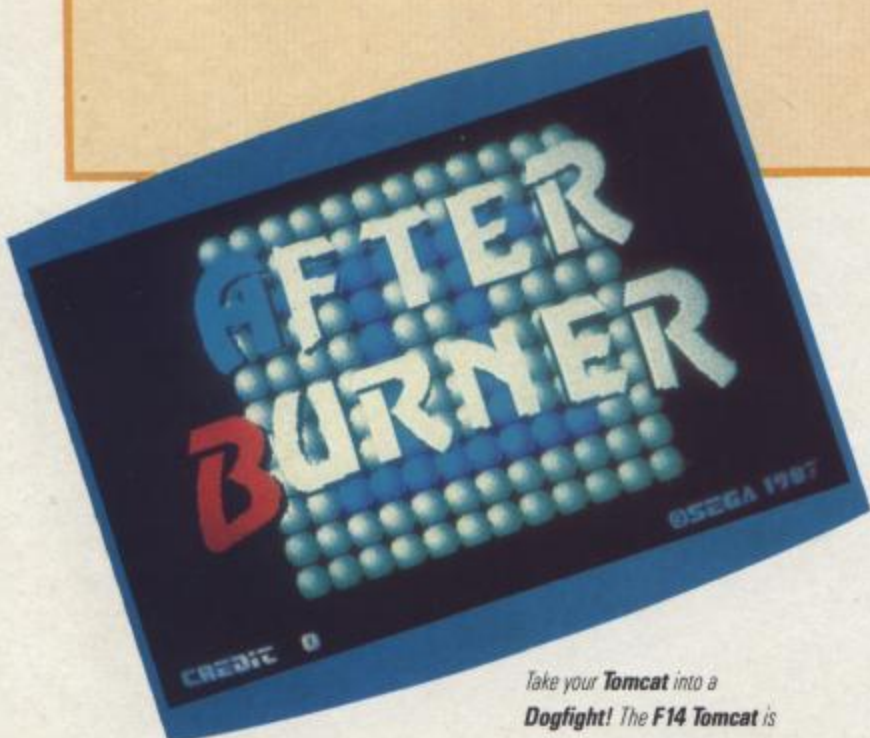
**AFTERBURNER** puts you in the adrenalin-pumping world of the supersonic jet pilot.



**AFTERBURNER'S** mind-boggling vital statistics are enough to make your jaw drop. The superb "sit-down" machine features **4-way** cockpit rotation, and weighs in at over **800lbs**. (that's about equivalent to **four** heavyweight boxers or two and a half **Sumo** wrestlers!!)



**AFTERBURNER** is a great game, you'll be a fool to miss it' **CRASH**, Xmas Special 1988.



Take your **Tomcat** into a **Dogfight!** The **F14 Tomcat** is truly awesome in battle. **AFTERBURNER** is as close as you can get – without enlisting – to the realism of a supersonic dogfight!



Sega's impressive **Deluxe** and **Upright** machines, proved a smash hit with arcade fans up and down the country throughout 1988.







## ARGONAUT SOFTWARE (ST/Amiga Programming)

Jez San, and his 10 strong team of confederates, need little introduction in the Amiga and ST world. Their first title 'Starglider' set the standard by which other 16 bit games were judged. Their current success with its sequel 'Starglider 2' affirms their enormous talent, with further acclaim awaiting them with their ST and Amiga versions of **AFTERBURNER**.

To get the feel of the game, they played **AFTERBURNER** at the Software Studios, and thereafter worked from playthrough videos. Richard Clucas, manager of **AFTERBURNER ST/Amiga** explained, "We made a video of our own, playing the game through to the end, and then Jon made his maps of the game from that, making sure everything was in the right place. It had to be authentic". Richard, 20 managed the development of the project, along with Adrian Friday, 19, who was responsible for the sprite drawing routines, and flight formations of attacking aircraft.

As well as Richard and Adrian, there were two part-timers working on the **AFTERBURNER** project. James Hakewill, 17, was responsible for artwork, putting it through their special program to turn it into data (In case you're wondering how this works, it's a trade secret!). Jonathan Wolff 18, mapped each level, plotting the course of each section, and ensured that everything on the arcade machine found its way into the finished game.

## KEITH BERKHILL (Spectrum Programming)

Keith Berkhill, 26, is excited about the **Spectrum** version of **AFTERBURNER**, as he's used some interesting new techniques in the programming. "It's an improvement on techniques I've used in previous games. You usually only have a maximum of sixteen sprites, but on **AFTERBURNER** you can go up to twenty-five!" The most striking element of the Spectrum version is its speed. Keith explains how he did it. "I had to use a lot of trigonometry to calculate where everything was as you are moving in 3D. It's a long program, and there's a lot in it. It's almost like two different games! There's the bit with the tilting horizon, then you've got the canyon sequence. It's certainly the biggest game I've ever done".



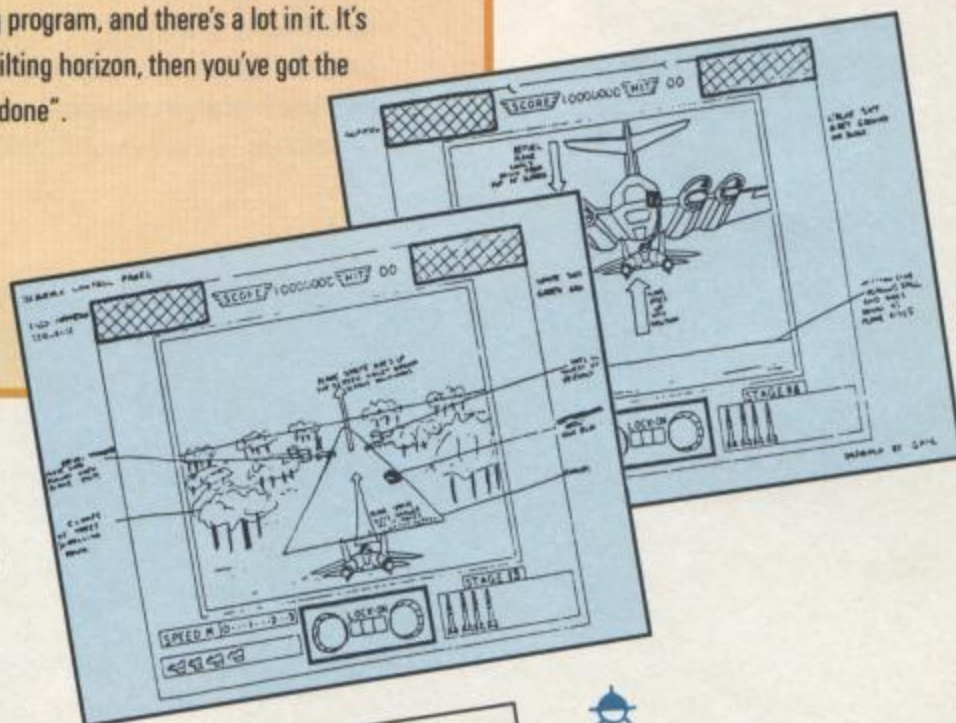
Argonaut Software - the team who put together the Atari ST and Amiga versions of **AFTERBURNER**. Previous credits include chart topping 'Starglider II'.



Keith Berkhill faced a daunting prospect - he had to fit **AFTERBURNER's** massive 3 megabytes of memory into the humble 48K Spectrum. This however, proved no problem to Keith, the man also responsible for other Spectrum classics such as 'Ghosts n' Goblins', 'Space Harrier' and 'Commando'.



Detailed storyboards were drawn up which gave the programmers vital information as to how the game was to be structured. Each one of **AFTERBURNER's** 23 levels must be mapped and checked before work could begin.



"Every project we do is a team effort" A grand total of 21 people collaborated on the **AFTERBURNER C64** version at Dalali Software. The project was spearheaded by Steve Barber, Chris Walsh and Andrew Mucho, with Dalali Software's Director Hanan Samara providing a guiding hand.



Nick Cook from game design house **FOCUS**, provided the graphics for all the **AFTERBURNER** conversions. **FOCUS**, have long been associated with high quality work, teaming up with Activision on many previous occasions on titles such as 'Nightmare', 'Enduro Racer' and 'Aliens'.





## DALALI SOFTWARE *(Commodore 64 programming)*

Working on **AFTERBURNER C64** was a real team effort for microchip veterans Dalali Software. Steve Barber, 19, did the 3D analysis, Chris Walsh, 20, was the programmer, Andrew Mucho, 19, did the graphics and the celebrated programmeress, Hanan Samara, (age withheld since she's a director of the company!), was the manager of the project.

"The speed of **AFTERBURNER** is essential. With the C64 you have to constantly review at the start of the project what techniques you will use to maintain the speed. If we couldn't maintain that, then it wasn't worthwhile doing it!" They had to take a character set approach, rather than a bitmap, because "there's just not enough machine there to shift it around! At the end of the day, it's not been a difficult game, just big"

## FOCUS *(graphics)*

Nick Cook, 25, is Focus's head man. He took on the **AFTERBURNER** project with great enthusiasm, making careful sketches from the screens, which were then made into the graphics for scenery, enemy planes, ships, and your own aircraft. Focus develop their graphics on the **ST** and **Amiga** machines, and then port the results down to the other target machines.

## MUSIC

Whilst the programmers and designers worked on the nuts and bolts of **AFTERBURNER**, a whole team of musicians put their considerable talents to work to create the soundtracks that would accompany the game.

Uncle Art were an obvious choice for the **ST** and **Amiga** versions, with such titles as 'Starglider 1 & 2', 'Carrier Command' and 'International Karate +' to their credit. Adam Gilmour ('Winter Olympiad'), provided the Commodore music, with Foursfield working on the Spectrum and Amstrad tracks.



"Spectrum owners can revel in one of the fastest and most impressive arcade games to appear in the 6-year history of the machine..."

**AFTERBURNER** is an excellent conversion..."

Julian Rignall, Computer & Video Games, Dec. 1988



Available for:

Spectrum	£9.99	<b>OUT NOW</b>
C64/128	£9.99	
Cass/	£14.99	<b>OUT NOW</b>
Disk		<b>OUT NOW</b>
Amstrad	£9.99	
CPC	Cass/	<b>OUT NOW</b>
	£14.99	
	Disk	<b>OUT NOW</b>
Atari ST	£19.99	<b>OUT NOW</b>
Amiga	£24.99	<b>JAN '89</b>
MSX	£9.99	<b>OUT NOW</b>



Not only do you get a great game when you buy **AFTERBURNER**, you also get lots of goodies, including a free "Aerial Arcade Ace" badge, your very own **Mission Briefing** booklet, a fantastic panoramic poster and the chance to win a flight of a lifetime on Concorde.

**The Software Studios.** Activision's **Southampton**-based development team, spent many hours of detailed planning and research on the project. Saul Marchese and Philip Taysom discuss here new programming techniques that will be used to ensure **AFTERBURNER** stays faithful to the arcade original.







## THE FINAL CHAPTER

**A**s the weeks rolled by, progress was closely monitored with regular updates to revise, check and revise again. It soon became clear that this was to be no ordinary adaptation – **AFTERBURNER** was destined to become the conversion of the decade.

The teams had done their work. All the stunning original features of the game were incorporated. The 360° roll, the numerous amazing terrains, the pulse-pounding soundtrack – were all there. And **Sega** themselves were so **impressed**, they commissioned an extra conversion for the PC!

Now, everyone will be able to experience the sensation of piloting an **F-14 Tomcat** – and surviving another mission. So strap yourself in, engage throttle – and take to the skies for the game of the century!

## THE F-14 TOMCAT – THE WORLD'S DEADLIEST COMBAT AIRCRAFT

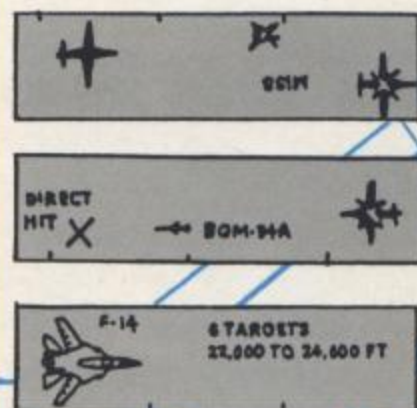
**T**he F-14 Tomcat has a superb pedigree. Manufactured by Grumman – who made the F6F Hellcat, the F7F Tigercat and the F9F Panther – it is one of the world's most potent interceptors. Its arsenal is remarkable: all-aspect heat-seeking air-to-air short-range missiles; the AIM-7F Sparrow for medium range; and the incredible AIM-54 Phoenix, a truly long-range weapon with the ability to engage and destroy targets at ranges in excess of 100 miles. In addition, there is a single Vulcan 20mm cannon complete with 675 rounds of ammunition for close-in dogfights.

The Tomcat also has a superb weapons control system (*the Hughes AWG-9*) with the ability to detect targets at ranges of more than 115 miles. The system allows the pilot to search for intruders while also tracking as many as 24 potential targets and engaging up to six of them with AIM-54 missiles.

The Tomcat made its operational debut in September 1974 in the Western Pacific. Since then, Tomcat squadrons have departed from US ports for extended tours of overseas duty on no less than 42 occasions. The aircraft has replaced the older fighters such as the McDonnell Douglas F-4 Phantom in the US Navy's front-line inventory.



The **F-14 Tomcat** can reach a scorching Mach 2.34 at altitude and Mach 1.2 at sea-level – **wow!**



Whether on **routine** training missions, or **special** air-to-air combat engagements, the **F-14 Tomcat** is ready to **pounce**, its fearsome missiles lie in wait to **eliminate** any **enemy** foolhardy enough to tangle with it.



SEGA





# ROLL CALL

## PILOTS:

Keith Berkhill	<i>(Spectrum)</i>
Dalali Software Ltd	<i>(C64)</i>
Argonaut Software Ltd	<i>(ST &amp; Amiga)</i>
Mr Micro	<i>(MSX)</i>
Focus C.E. Ltd	<i>(ST, Amiga, Spec, C64, Ams, graphics)</i>
Uncle Art	<i>(ST &amp; Amiga music)</i>
Foursfield	<i>(Spectrum, Amstrad &amp; MSX music)</i>
Adam Gilmour	<i>(C64 music)</i>

## GROUND CREW:

Stuart Hibbert	<i>(Software Producer)</i>
Saul Marchese	<i>(Associate Producer)</i>
Nick Dawson	<i>(Tester)</i>
Dave Cummins	<i>(Tester)</i>

## MISSION CONTROL:

ACTIVISION™ SEGA©

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Road, Reading, Berks, RG2 0JN.  
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